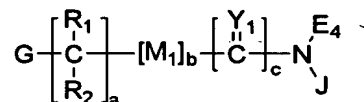


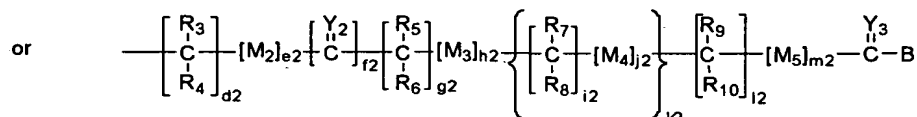
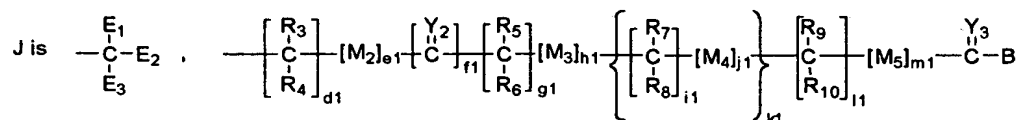
**WE CLAIM:**

1. A compound comprising the formula:

(I)



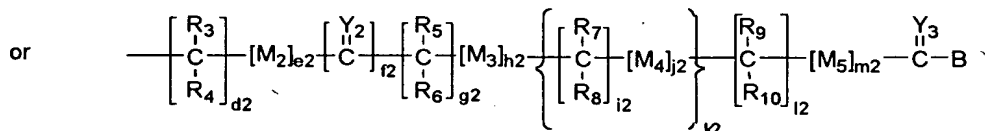
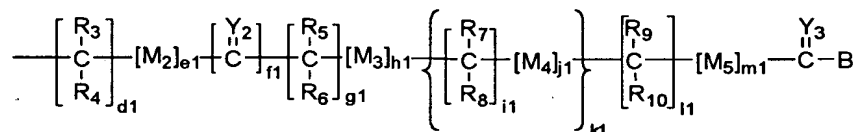
5 wherein:



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$E_{1-4}$  are independently selected from the group consisting of hydrogen,  $C_{1-6}$  alkyls,  $C_{3-12}$  branched alkyls,  $C_{3-8}$  cycloalkyls,  $C_{1-6}$  substituted alkyls,  $C_{3-8}$  substituted cycloalkyls, aryls, substituted aryls, aralkyls,  $C_{1-6}$  heteroalkyls, substituted  $C_{1-6}$  heteroalkyls,  $C_{1-6}$  alkoxy, phenoxy,  $C_{1-6}$  heteroalkoxy,

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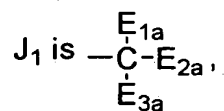
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and at least one of  $E_{1-4}$  includes a B moiety;

B is a leaving group, OH, a residue of a hydroxyl-containing moiety, a residue of an amine-containing moiety or



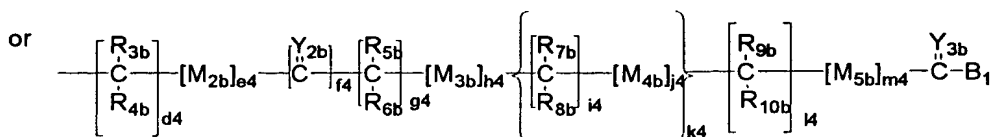
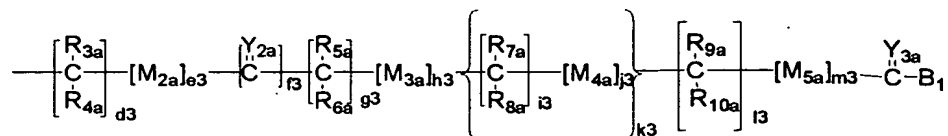
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wherein  $E_5$  is independently selected from the same group which defines $E_{1-4}$ ;

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$E_{1a-3a}$  are independently selected from the group consisting of hydrogen,  $C_{1-6}$  alkyls,

C<sub>3-12</sub> branched alkyls, C<sub>3-8</sub> cycloalkyls, C<sub>1-6</sub> substituted alkyls, C<sub>3-8</sub> substituted cycloalkyls, aryls, substituted aryls, aralkyls, C<sub>1-6</sub> heteroalkyls, substituted C<sub>1-6</sub> heteroalkyls, C<sub>1-6</sub> alkoxy, phenoxy, C<sub>1-6</sub> heteroalkoxy,

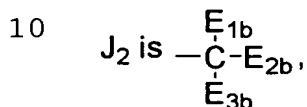


- 5 wherein B<sub>1</sub> is a leaving group, OH, a residue of a hydroxyl-containing moiety or a residue of an amine-containing moiety or...



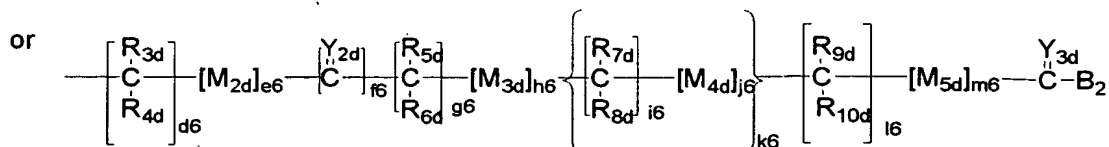
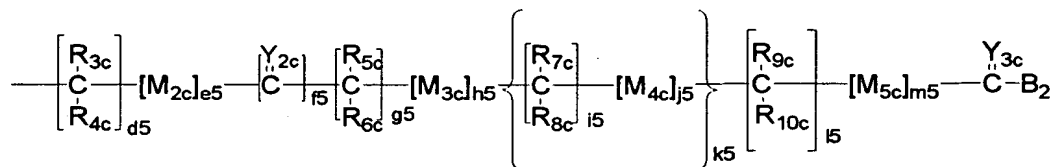
wherein E<sub>6</sub> is independently selected from the same group which defines

E<sub>1-4</sub>;



wherein E<sub>1b-3b</sub> are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyls, C<sub>3-12</sub> branched alkyls, C<sub>3-8</sub> cycloalkyls, C<sub>1-6</sub> substituted alkyls, C<sub>3-8</sub> substituted cycloalkyls, aryls, substituted aryls, aralkyls, C<sub>1-6</sub> heteroalkyls,

- 15 substituted C<sub>1-6</sub> heteroalkyls, C<sub>1-6</sub> alkoxy, phenoxy, C<sub>1-6</sub> heteroalkoxy,



wherein B<sub>2</sub> is a leaving group, OH, a residue of a hydroxyl-containing moiety or a residue of an amine-containing moiety;

G is a polymeric residue;

Y<sub>1-3</sub>, Y<sub>2a-d</sub> and Y<sub>3a-d</sub> are each independently O, S or NR<sub>11a</sub>

5 M<sub>1-4</sub>, M<sub>2a-2d</sub>, M<sub>3a-3d</sub>, and M<sub>4a-4d</sub> are each independently O, S or NR<sub>11b</sub>;

M<sub>5</sub> and M<sub>5a-d</sub> are each independently X or Q,

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from C(=Y<sub>3</sub>) or C(=Y<sub>3a-d</sub>);

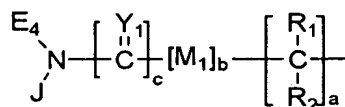
10 R<sub>1-10</sub>, R<sub>1a-11a</sub>, R<sub>1b-11b</sub>, R<sub>1c-10c</sub> and R<sub>1d-10d</sub> are each independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyls, C<sub>3-12</sub> branched alkyls, C<sub>3-8</sub> cycloalkyls, C<sub>1-6</sub> substituted alkyls, C<sub>3-8</sub> substituted cycloalkyls, aryls, substituted aryls, aralkyls, C<sub>1-6</sub> heteroalkyls, substituted C<sub>1-6</sub> heteroalkyls, C<sub>1-6</sub> alkoxy, phenoxy and C<sub>1-6</sub> heteroalkoxy; and

15 a, b, c, d1-d6, e1-e6, f1-f6, g1-g6, h1-h6, i1-i6, j1-j6, k1-k6, l1-l6, m1-m6 are each independently zero or a positive integer.

2. The compound of claim 1, wherein G further comprises a capping group A, which is selected from the group consisting of hydrogen, CO<sub>2</sub>H, C<sub>1-6</sub> alkyl moieties, and

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(I')

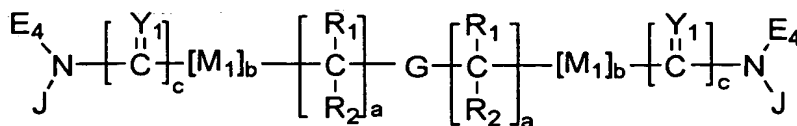


wherein a, b, c, R<sub>1-2</sub>, M<sub>1</sub>, Y<sub>1</sub>, E<sub>4</sub> and J are the same as set forth in claim 1.

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3. A compound of claim <sup>✓</sup>2, of the formula:



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4. The compound of claim <sup>✓</sup>1, where  $a, b, c, d1-d6, e1-e6, f1-f6, g1-g6, h1-h6, i1-i6, j1-j6, k1-k6, l1-l6, m1-m6$  are independently zero, one or two.

5. The compound of claim <sup>✓</sup>1, wherein  $R_1$  and  $R_2$  are both H,  $a$  and  $c$  are one,  $Y_1$  is O and both  $E_1$  and  $E_4$  are H.

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6. The compound of claim <sup>✓</sup>1, wherein G is polyalkylene oxide residue.

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7. The compound of claim <sup>✓</sup>6, wherein G is a polyethylene glycol residue.

8. The compound of claim <sup>✓</sup>1, wherein G is  $-O-(CH_2CH_2O)_x$  or  $-O-(CH(CH_3)CH_2O)_x$  wherein  $x$  is the degree of polymerization.

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9. The compound of claim <sup>✓</sup>8, wherein G is  $-O-(CH_2CH_2O)_x$  and  $x$  is a positive integer so that the weight average molecular weight is at least about 20,000.

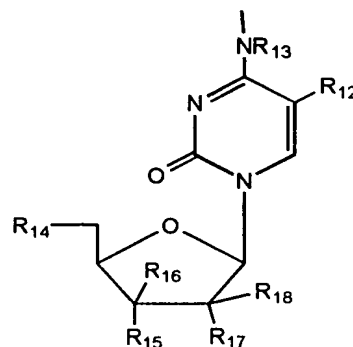
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10. The compound of claim <sup>✓</sup>9, wherein G has a weight average molecular weight of from about 20,000 to about 100,000.

11. The compound of claim <sup>✓</sup>10, wherein G has a weight average molecular weight of from about 25,000 to about 60,000.

12. The compound of claim 1, wherein B is a residue of an amine - containing moiety.

13. The compound of claim 12, wherein said amine-containing moiety is

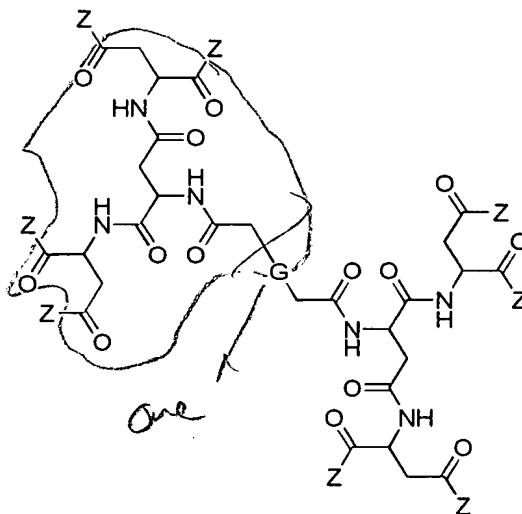


wherein

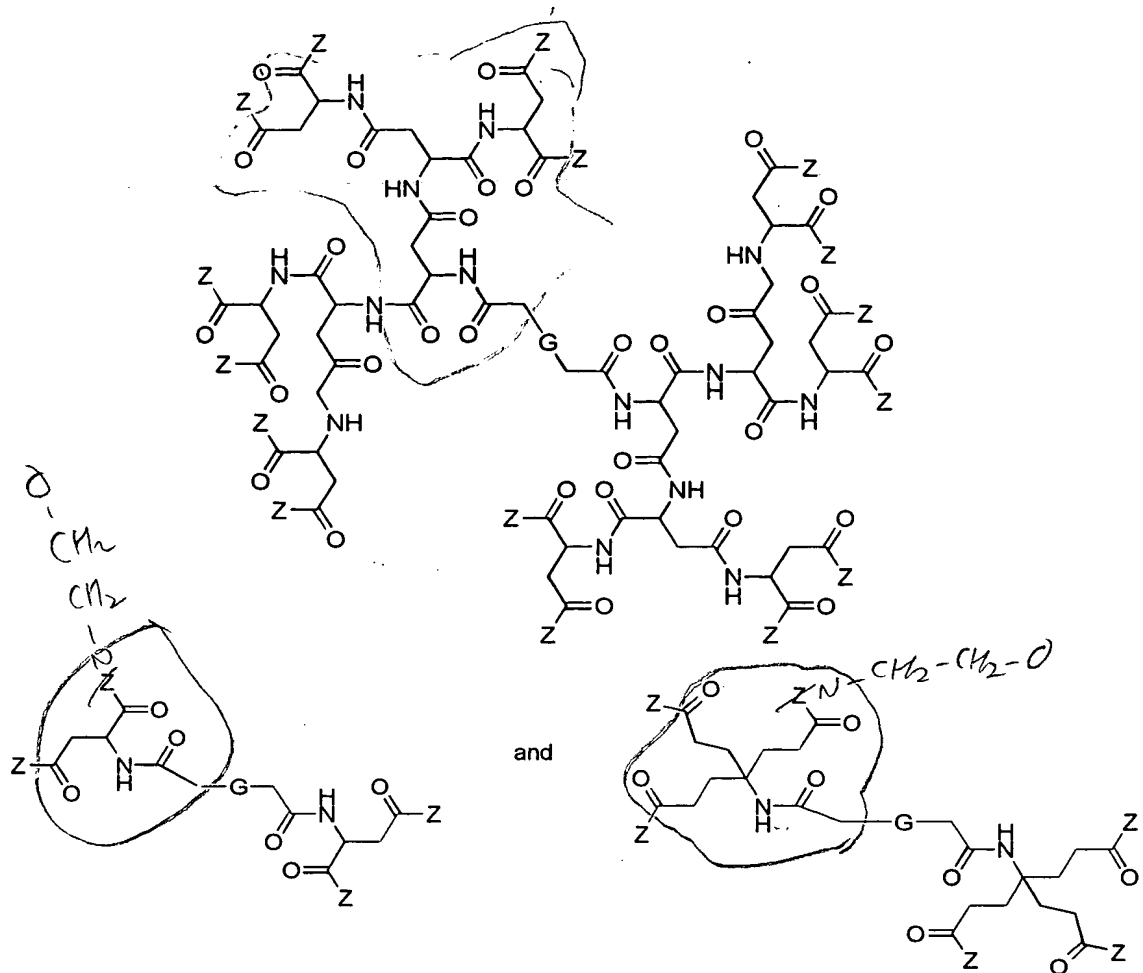
$\text{R}_{12-13}$  are independently selected from the group consisting of hydrogen,  $\text{C}_{1-6}$  alkyls,  $\text{C}_{3-12}$  branched alkyls,  $\text{C}_{3-8}$  cycloalkyls,  $\text{C}_{1-6}$  substituted alkyls,  $\text{C}_{3-8}$  substituted cycloalkyls, aryls, halo, substituted aryls, aralkyls,  $\text{C}_{1-6}$  heteroalkyls, substituted  $\text{C}_{1-6}$  heteroalkyls;

$\text{R}_{14-18}$  are independently selected from alkoxy, e.g.  $\text{OR}_{19}$  or, in the alternative,  $\text{H}$ ,  $\text{OH}$ ,  $\text{N}_3$ ,  $\text{NHR}_{20}$ ,  $\text{NO}_2$  or  $\text{CN}$ , fluoro, chloro, bromo, iodo, where  $\text{R}_{19-20}$  are independently selected from the same group which defines  $\text{R}_{12-13}$ .

14. A compound of claim 3, selected from the group consisting of:



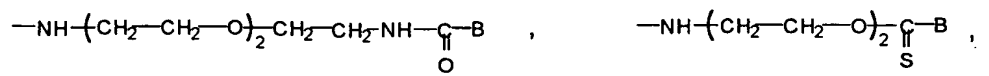
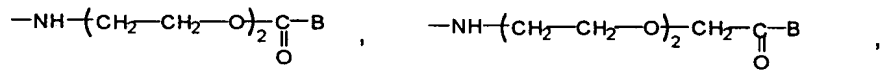
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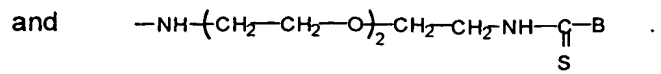
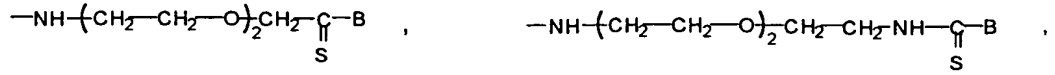
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wherein Z is one of:

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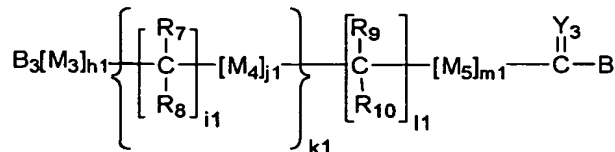


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15. A method of preparing a polymeric transport system, comprising

a) reacting compound of the formula:



wherein

B is a residue of a biologically active amine-containing moiety or a hydroxyl-containing moiety;

B<sub>3</sub> is a cleavable protecting group;

Y<sub>3</sub> is O, S, or NR<sub>11a</sub>;

M<sub>3</sub> and M<sub>4</sub> are independently O, S, or NR<sub>11b</sub>;

M<sub>5</sub> is X or Q;

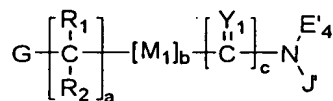
wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from C(=Y<sub>3</sub>);

R<sub>7-10</sub> and R<sub>11a-b</sub> are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyls, C<sub>3-12</sub> branched alkyls, C<sub>3-8</sub> cycloalkyls, C<sub>1-6</sub> substituted alkyls, C<sub>3-8</sub> substituted cycloalkyls, aryls, substituted aryls, aralkyls, C<sub>1-6</sub> heteroalkyls and substituted C<sub>1-6</sub> heteroalkyls;

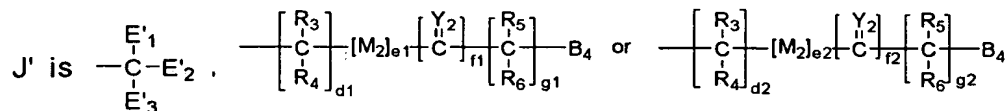
*h1-m1* are each independently zero or a positive integer;

b) cleaving the cleavable protecting group B<sub>3</sub>; and

c) reacting the resultant compound with a compound of the formula

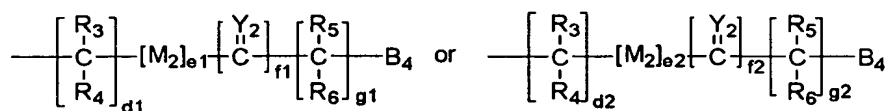


wherein



E'<sub>1-4</sub> are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyls, C<sub>3-12</sub> branched alkyls, C<sub>3-8</sub> cycloalkyls, C<sub>1-6</sub> substituted alkyls,

C<sub>3-8</sub> substituted cycloalkyls, aryls, substituted aryls, aralkyls, C<sub>1-6</sub> heteroalkyls, substituted C<sub>1-6</sub> heteroalkyls, C<sub>1-6</sub> alkoxy, phenoxy, C<sub>1-6</sub> heteroalkoxy,



wherein

B<sub>4</sub> is a leaving group;

G is a polymer residue;

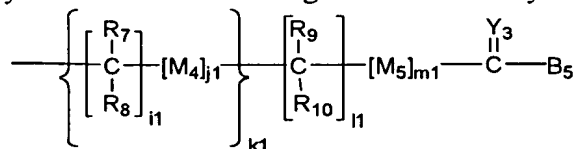
Y<sub>1-2</sub> are independently O, S, or NR<sub>11a</sub>;

M<sub>1-2</sub> are independently O, S, or NR<sub>11b</sub>.

R<sub>1-6</sub>, R<sub>9</sub> and R<sub>10</sub> are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyls, C<sub>3-12</sub> branched alkyls, C<sub>3-8</sub> cycloalkyls, C<sub>1-6</sub> substituted alkyls, C<sub>3-8</sub> substituted cycloalkyls, aryls, substituted aryls, aralkyls, C<sub>1-6</sub> heteroalkyls and substituted C<sub>1-6</sub> heteroalkyls;

a, b, c, d<sub>1</sub>-g<sub>1</sub> and d<sub>2</sub>-g<sub>2</sub> are each independently zero or a positive integer, whereby a polymeric conjugate is formed.

16. A method of preparing a polymeric transport system, comprising:  
reacting a biologically active moiety containing an unprotected amino or hydroxyl group with polymeric residue containing a terminal moiety of the formula:



wherein:

Y<sub>3</sub> is O, S, or NR<sub>11a</sub>;

R<sub>7-10</sub> and NR<sub>11a</sub> are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyls, C<sub>3-12</sub> branched alkyls, C<sub>3-8</sub> cycloalkyls, C<sub>1-6</sub> substituted alkyls, C<sub>3-8</sub> substituted cycloalkyls, aryls, substituted aryls, aralkyls, C<sub>1-6</sub> heteroalkyls and substituted C<sub>1-6</sub> heteroalkyls;

M<sub>4,5</sub> are independently O, S, or NR<sub>11b</sub>;

B<sub>5</sub> is a leaving group capable of reacting with an unprotected amino or



